



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0418; Product Identifier 2016-CE-041-AD; Amendment 39-19645; AD 2019-10-06]

RIN 2120-AA64

Airworthiness Directives; Aviat Aircraft Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Aviat Aircraft Inc. Models A-1C-180 and A-1C-200 airplanes equipped with a Rapco part number RA1798-00-1 fuel vent check valve installed on either wing or both. This AD was prompted by a report that the fuel tank vent check valves are sticking in the closed position causing fuel starvation to the engine. This AD requires revision of the airplane flight manual (AFM) to add a pre-flight check of the fuel vent check valves for proper operation and replacing any inoperative fuel vent check valve with an airworthy part. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Aviat Aircraft Inc., P.O. Box 1240, Afton, WY 83110; phone (307) 885-3151; fax: (307) 885-9674; email: aviat@aviataircraft.com; Internet: <http://aviataircraft.com>. You may view this

service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0418.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0418; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is Docket Operations, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Richard R. Thomas, Aviation Safety Engineer, FAA, Denver Aircraft Certification Office (ACO) Branch, 26805 East 68th Avenue, Room 214, Denver, Colorado 80249; phone: (303) 342-1085; fax: (303) 342-1088; email: richard.r.thomas@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Aviat Aircraft Inc. (Aviat) Models A-1C-180 and A-1C-200 airplanes equipped with Rapco part number (P/N) RA1798-00-1 fuel vent check valves. The NPRM published in the *Federal Register* on May 5, 2017 (82 FR 21142). The NPRM was prompted by a report of the fuel tank vent check valves sticking in the closed position causing fuel starvation to the engine. The incident airplane was equipped with Rapco P/N RA1798-00-1 fuel vent check valves. As designed, the check

valve ball seat on this P/N valve is nearly the same diameter as the ball and the ball can readily wedge itself in the seat and block the fuel tank vent. The NPRM proposed to require revising the AFM to add a pre-flight check of the fuel vent check valves for proper operation and replacing any inoperative fuel vent check valve with a Dukes P/N 1798-00-1 fuel check valve.

Actions Since the NPRM was Issued

Since we issued the NPRM, Aviat designed a new fuel vent check valve, P/N 38266-501, that can be installed in place of the Rapco fuel vent check valve. We determined this Aviat fuel vent check valve is not subject to the unsafe condition. We also determined that the Dukes fuel vent check valve, P/N 1798-00-1, cannot be installed to replace a Rapco fuel vent check valve due to a difference in length. Accordingly, we revised paragraph (i) of this AD to require replacing inoperative Rapco fuel vent check valves with Aviat valves instead of Dukes valves. We also removed the note from the Applicability section that referenced the Dukes valve.

We are issuing this AD to correct the unsafe condition on these products.

Comments

We gave the public the opportunity to participate in developing this final rule. We received no comments on the NPRM or on the determination of the cost to the public.

Additional Changes Made to the Final Rule

We updated the on-condition parts cost to reflect that removing and replacing the Rapco fuel vent check valve requires cutting a hole in the wing skin and installing an access cover over the hole once the valve has been replaced. We added the minimal cost of this cover to the on-condition parts cost. Labor cost was unaffected by the cover installation.

We clarified the requirement to amend the AFM and added a fourth step to the AFM amendment to alert the owner/operator (pilot) that an inoperative check valve must be replaced in accordance with this AD. We also removed the requirement to make a maintenance entry under part 43, as revising a flight manual is not a maintenance action. A record of the AFM change must still be made as required by 14 CFR 91.417(a)(2)(v).

We refined the requirements to remove and replace an inoperative fuel vent check valve by removing the references to steps 4 and 9 of the service information. Step 4 of the service information is no longer necessary due to other changes to this AD, and step 9 is unnecessary for this AD because it is required by standard maintenance practices under 14 CFR part 43. We also changed the language regarding replacing both valves with valves that are unaffected by this AD from “the repetitive pre-flight checks required in paragraph (g) of this AD are terminated” to “you may remove the AFM revisions required by paragraph (g) of this AD.” This change makes it clear that operators do not need an alternative method of compliance (AMOC) to return the AFM to its pre-AD configuration if they remove both Rapco valves.

Lastly, we added a second email address for requesting an AMOC. Requests must be submitted to both the assigned Aviation Safety Engineer and the Denver ACO Branch general email addresses.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed except for the changes previously discussed. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

We reviewed Aviat Mandatory Service Bulletin No. 33, Initial Release, dated November 11, 2016. The service bulletin contains procedures for checking the fuel vent check valve on each wing of the airplane for proper operation and replacing any inoperative fuel vent check valve. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 98 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Pre-flight check of the fuel vent check valve for proper operation as incorporated in the aircraft flight manual.	.5 work-hour X \$85 per hour = \$42.50 per pre-flight check	N/A	\$42.50	\$4,165

We conservatively estimated the cost to do a single pre-flight check. We recognize the pilot is allowed to perform this check without the assistance of a mechanic, which will significantly reduce the estimated cost. We further recognize that an individual airplane will require this check every pre-flight from the issuance of this AD until the end of its useful life as long as at least one P/N RA1798-00-1 fuel vent check valve is installed on either wing. We have no way of determining the total cost of repeating this check every pre-flight either for a single product or for all U.S. operators.

We estimate the following costs to do any necessary replacements that will be required based on the results of the pre-flight check. We have no way of determining the number of airplanes that may need these replacements.

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Remove and replace inoperative fuel vent check valve	2 work-hours (1 work-hour to remove and 1 work-hour to replace) X \$85 per hour = \$170 per fuel vent check valve. (There are 2 fuel vent check valves per airplane = \$340 to remove and replace both.)	\$330 per fuel vent check valve and \$25 per access cover. (\$710 for both.)	\$525 per fuel vent check valve. (\$1050 to remove and replace both.)

The access cover cost is for a solid color. It does not include custom paint schemes to match an individual airplane.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has

delegated the authority to issue ADs applicable to small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2019-10-06 **Aviat Aircraft Inc.**: Amendment 39-19645; Docket No. FAA-2017-0418;
Product Identifier 2016-CE-041-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF
PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Aviat Aircraft Inc. (Aviat) Models A-1C-180 and A-1C-200
airplanes, serial numbers 3181 through 3282, certificated in any category, that are
equipped with a Rapco part number (P/N) RA1798-00-1 fuel vent check valve on one or
both wings.

(d) Subject

Joint Aircraft System Component (JASC) Code 2820, Fuel Distribution.

(e) Unsafe Condition

This AD was prompted by a report that Rapco P/N RA1798-00-1 fuel vent check
valves are sticking in the closed position. We are issuing this AD to detect and correct
failure of the fuel tank vent check valve, which could result in fuel starvation to the
engine and cause the engine to shut down.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Verify Proper Operation of the Fuel Vent Check Valve on Each Wing

Before further flight after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), revise the airplane flight manual (AFM) as follows:

(1) Insert into the Limitations Section of the AFM steps 1 through 3 of the Accomplishment Instructions in Aviat Aircraft Inc. Mandatory Service Bulletin (MSB) No. 33, Initial Release, dated November 11, 2016 (Aviat SB, No. 33, IR).

(2) Immediately following steps 1 through 3, add the following language to the Limitations Section of the AFM: Step 4. If there is a stuck fuel vent check valve, it must be replaced in accordance with AD [INSERT THIS AD NUMBER] before further flight.

(3) This AFM revision requires preflight checks of the fuel vent check valve on each wing. This insertion and the steps therein may be performed by the owner/operator (pilot) holding at least a private pilot certificate. The AFM revision must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(h) Remove Inoperative Fuel Vent Check Valve

If a fuel vent check valve is not operating properly, before further flight, remove the inoperative valve by following steps 5 and 6 of the Accomplishment Instructions in Aviat SB, No. 33, IR.

(i) Replace Inoperative Fuel Vent Check Valve

Before further flight after removing any inoperative fuel vent check valve as required by paragraph (h) of this AD, replace it with an airworthy fuel vent check valve by following step 8 of the Accomplishment Instructions in Aviat SB, No. 33, IR. If both fuel vent check valves, Rapco P/N RA1798-00-1, are replaced with Aviat P/N 38266-501 fuel vent check valves, you may remove the AFM revisions required by paragraph (g)(1) and (2) of this AD.

(j) Special Flight Permit

Special flight permits are not necessary for the preflight checks. A special flight permit is allowed for this AD per 14 CFR 39.23 with limitations. Special flight permits are permitted for the airplane to be flown visual flight rules only to a location where the inoperative fuel vent check valve can be removed and replaced. No special flight permits are allowed if both valves are found to be inoperative.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Denver ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person and office identified in paragraph (l)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(l) Related Information

For more information about this AD, contact Richard R. Thomas, Aviation Safety Engineer (ASE), FAA, Denver ACO Branch, 26805 East 68th Avenue, Room 214, Denver, Colorado 80249; phone: (303) 342-1085; fax: (303) 342-1088; email: richard.r.thomas@faa.gov. If an AMOC is requested by email, it must be sent to both the ASE's email and the Denver ACO Branch general email: 9-Denver-Aircraft-Cert@faa.gov.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Aviat Aircraft Inc. Mandatory Service Bulletin No. 33, Initial Release, dated November 11, 2016.

(ii) [Reserved]

(3) For service information identified in this AD, contact Aviat Aircraft Inc., P.O. Box 1240, Afton, WY 83110; phone (307) 885-3151; fax: (307) 885-9674; email: aviat@aviataircraft.com; Internet: <http://aviataircraft.com>.

(4) You may view this service information at FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.
Issued in Kansas City, Missouri, on June 10, 2019.

Melvin J. Johnson
Aircraft Certification Service
Deputy Director, Policy and Innovation Division, AIR-601

[FR Doc. 2019-12621 Filed: 6/14/2019 8:45 am; Publication Date: 6/17/2019]